M.R.O. 1—77,006—8-6-37.

(1) Number of pages 16

(2) Date of repair 19.6.64

(3) Initials of the Referencer

MADRAS RECORD OFFICE.

Government of Madras.

Public works DEPARTMENT.

G.O. No. 145-46 Press ~~Mis.~~

286-88

Dated 17. 1 1872.

Not to be folded or roughly handled

C.O.

1F

Proceedings of the Madras Government, Public Works Department,
17th January **1872.**

Read the following papers :—

No. 286. From the Acting Superintending Engineer, 5th Division, to the Secretary to Government, Public Works Department, dated Trinomalay, 8th December 1871, No. 201.

WITH reference to Memorandum No. 83 of the 30th November 1871, I have the honour to submit to Government the under-mentioned papers connected with the Vellaur bridge, recently destroyed :—

1 Plan.	1 Specification.
1 Survey.	1 Comparative Statement.
1 Estimate.	1 Abstract Estimate.

No. 287. From the Assistant Secretary to the Government of India, Public Works Department, (Buildings and Roads—Communications,) to the Secretary to the Government of Madras in the Public Works Department, dated Fort William, 11th December 1871, No. 448-B.—C.

I AM directed to request that, with the permission of His Excellency the **Governor** in Council, you will furnish this Office with the report on the failure of the Vellaur bridge, which is just now much spoken of in the public newspapers.

No. 288. ORDER THEREON, 17th January 1872, No. 145.

CIVIL WORKS, No. 13.

ORDERED that the following **letter** be sent :—

(Here enter No. 146, dated 17th January 1871.) 1872

(True Extract.)

(Signed) J. CARPENDALE, Colonel, R.E.,
Secretary to Government.

Exd. F. R. Bantleman.

Govt. of {1872} Madras.

PUBLIC WORKS.

To

Dated January 17th,

Recd. Encl.

G. O., 17th January 1872, No. 145.

JANUARY

Nos. 286-288

Vellaur bridge.—Passing o
papers relating to the failure of th
bridge, South Arcot District.

PUBLIC WORKS DEPARTMENT,
FORT ST. GEORGE, 17*th January* 1872.

No. 289.

No. 146.

To

THE SECRETARY TO THE GOVERNMENT OF INDIA,

PUBLIC WORKS DEPARTMENT.

CIVIL WORKS, No 14.

SIR,—I am directed to acknowledge your letter of the 11th instant, calling for a report on the failure of the Vellaur bridge in South Arcot, and to forward, for the information of the Government of India, the only reports on the accident which have yet been received with the order of this Government thereon.

2 From these papers it will be seen that the immediate cause of the failure of the bridge has not yet been asce tained, but that this Government is quite sensible of the necessity for the most stringent inquiry into the matter, which will be made as soon as the state of the river will admit, and the result of which will be duly communicated to the Government of India. The inquiry will be conducted by the most independent and impartial agency at our disposal.

I have the honour to be,

Sir,

Your most obedient servant,

Colonel, R.E.,

Secretary to Government.

Exd. F. R. Bantleman.

Read the [illegible] — P

Supltg. Engrs. Office 5th Dn.,
Trimamalay 8th December 1871 —

No. 201.

From

Captain J. Vertue R. E.,
Acting Superintending Engr.,
5th Division.

To,

Colonel J. Carpendale R. E.,
Secretary to Government,
Public Works Deptt.

Enclosures 6.

Sir,

With reference to Memo. No. 83 of the 30th November 1871, I have the honor to submit to Government, the undermentioned papers connected with the Vellaur Bridge, recently destroyed.—

1 Plan	1 Specification
1 Survey	1 Comparative Statement
1 Estimate	1 Abstract Estimate.

I have the honor to be
Sir,
Your Most Obedt. Servant

James Vertue Captn. R.E.
Acting Supltg. Engineer, 5th Dn.

P. W. 1871 Depar C.
Offi of Secy for Gov
From No 5998.
The Acting Supdt Engr
5th Dn
To, The Secy to Govt
P. W. D.

Dated 8th December
Recd 18th December 1871
[illegible]
Encs 6
9/1/72 No. 201.
22-2-72
Submits Plans, speci-
fication and Estimate &c
of the Vellar Bridge
recently destroyed in
the District of South
Arcot.
No 145 & 146-17-1-72

No 286

C 6 Jany 72 [illegible]

No. 448 B.—~~M.~~ C.

All communications should be addressed to the Secretary.

GOVERNMENT OF INDIA.

PUBLIC WORKS DEPARTMENT.

BUILDINDS & ROADS.

~~Military.~~ Communications

To

The Secretary to the Govt. of Madras.
in the Public Works Department.

Fort William, 11th December 1871.

Sir,

I am directed to request that with the permission of His Excellency the Governor in Council, you will furnish this Office with the report on the failure of the Vellaur bridge, which is just now much spoken of in the public newspapers.

I have the honor to be,
Sir,
Your most obedt. Servant,

[illegible]

Asstt. Secretary to the Govt. of India

P. W. 1871 Depart.
Pro. of Gov. for Jany 12-41
No. 6022.

From.

The Government of India.

Dated 11th } December/71
Recd. 18th }

No. 448 B. C.

Requesting the report on the failure of the Vellaur Bridge -

No. 145 & 146. 17th Jany/72

No. 287

6th Jany/72 Pa. 11

No 145

3

Ordered that the following letter be sent.

16

To

146

The Secretary to the
Govt. of India.

Sir,

I am directed to acknowledge your letter of the 11th Instant calling for a report on the failure of the Vellaur bridge in South Arcot, and to forward for the information of the Govt. of India the only reports on the accident which have yet been received with the order of this Govt. thereon.

N.

From

From these papers it will be seen that the immediate cause of the failure of the bridge has not yet been ascertained but that this Govt. is quite sensible of the necessity for the ~~fullest~~ most stringent enquiry into the matter which will be made as soon as the state of the river will admit and the result of which will be duly communicated to the Govt. of India.ˣ [Meanwhile, I am to observe that there is no reason to suppose that the

ˣ I would insert.
The enquiry will be conducted by the most independent and impartial agency at our disposal.

I would stop here.
It seems not improbable that sufficient waterway was not afforded & that would be a defect in design. The materials & method of

failure was owing to bad construction, but the structure while quite green was exposed to the force of an unprecedented flood that would have been a severe trial to fully seasoned masonry. The Bridge consisted of eleven arches of 45 feet span eliptical in form, having a rise of 11/4 feet, and turned on piers 12 feet high - the extreme height from the flooring of the bridge being thus 23/4 feet. The ordinary flood level being 15.3 feet above the flooring. The foundations supposing

construction will be better understood hereafter; I think that it is not expedient to vindicate the officers of the Dept. warmly and prematurely. Full justice may be done to them hereafter. N.

them to have been
built according to the
sanctioned Plan and
specification, which
there is no reason to
doubt, were suitable
in design and of ap-
proved construction
being 5 feet deep on
wells extending five
feet lower which were
filled with brick
cubes set in concrete
made of Hydraulic mor-
tar or of Hydraulic con-
crete entirely, and the
proper precautions of
masonry flooring and
retaining walls also on
wells was not omitted.

5

13E

While under con-
struction towards the
end of 1869 this bridge
was subjected to a severe
flood "but the abutments,
Piers, and flooring, re-
mained uninjured and
not a brick was dis-
placed" but on this last
occasion it will be
seen that the Executive
Engineer calculated
there must have been
a depth of from 17 to
18 feet of water passing
under the bridge while
the Overseer gives it
at 19 1/2]

J.
28 Dec

22
2

Despd 18/1/72 with a copy of
Govt 3140 of 13 Dec 71.

No 5998 2602

Govt. of Madras. 1872

PUBLIC WORKS.

To The Secretary to the Govt of India

Dated

Recd.

End. 6

G. O. 17th Jany 1872 No. 145 & 146

Nos. 286 @ 288 & 289

Vellaur Bridge - Papers relating to the failure of the Vellaur Bridge, South Arcot Dt.

Forwarding papers relating to the failure of the Vellaur Bridge in the South Arcot Dt.